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ABSTRACT

This paper is based on a longitudinal study of the development of questions in the spontaneous speech of two anglophone boys learning French by attending French language schools. The development of form-meaning relations in information questions in the children's French L2 speech was examined and comparisons were made with the same form-meaning development in the speech of children learning their first language. In addition, the use of word order inversion in questions in the learners' speech was compared to the use of inversion by the adult native speaker who interacted with them in the tape recorded play sessions on which the study is based. The results show clearly the necessity for examining L2 learners' speech in context and for comparing L2 learners' speech with that of native speakers. (Author)

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QUESTION FORM AND MEANING IN THE SPEECH OF YOUNG CHILDREN LEARNING FRENCH

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This study of question form and meaning in the speech of two young learners of French as a second language is one aspect of a longitudinal study of these children's second language (L2) development. The study began when the children were five years old and were in an immersion kindergarten program in Montreal. We continued to follow them when their parents moved them from immersion to "submersion", that is, from classes where their teachers were francophones but their peers were all anglophones to classes where anglophones formed a tiny minority in an otherwise French-speaking environment. The boys, whom I call Greg and Kenny, are now eight years old and have completed grades 1 and 2 in French language schools. They no longer attend the same school, but they are good friends who see each other often. The data on which our research is based consist primarily of audio recordings of informal play sessions in which Greg and Kenny played together with Louise Tétreault, an adult native speaker of French who has been the research assistant throughout this project (see Lightbown, 1977a and 1978 for details of data collection procedures).

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The general approach to the analysis of these data has been to examine the form and the meaning of spontaneously produced utterances. Meaning is inferred from an examination of the form, the linguistic context, and the non-linguistic context in which each utterance occurs. Utterances are classified according to preliminary categories, but then further divided or divided differently as unforeseen regularities and variations become evident (see Bloom and Lahey, 1978, for extensive discussion of this approach to the study of normal and deviant first language development). By following the language learners longitudinally in the same setting (e.g., same participants, same location, same toys), it is possible to attribute changes in linguistic behavior to changes in the learners' knowledge of the language rather than to changes in the setting.

In earlier reports on this longitudinal project I described the first sentences which Greg and Kenny produced in French, comparing the form of these sentences and the meanings they encoded with the form-meaning relations in the first sentences of children learning French or English as the first language (L1) (Lightbown, 1977a, 1977b). The major observation of that research was that, in the

early stages of language learning, both L1 and child L2 learners involved in similar activities produced sentences within the same narrow range of about ten form-meaning relations. For example, they talked about the names of objects, actions performed by people, possession of objects, the location of objects and events. The difference between L1 and L2 learners was that, whereas L1 learners began with one or two form-meaning relations and added new ones gradually in a pattern which was partly predictable by cognitive growth, the L2 learners used a small number of forms to encode all ten meanings from the very beginning. In order to do this, they used many pro-forms. Pronouns, especially ça, permitted them to talk about anything they could point to. However, they also used pro-forms for other parts of speech. They even invented pro-verbs, using, for example, a form of être as an action verb, or mettre as if it meant do or any other action verb (see also Felix, 1975).

In another report on these children's L2 development, I described the development of information questions during their first fifteen months of submersion in French (Lightbown, 1978). The focus of that study was on Wh-words or, as I called them there, Q-words, since the majority of question words in French happen to begin with Q, e.g., qui, quand, quoi. The findings of that study were that Q-word forms had

approximately the same order of emergence and the same relative frequency overall as has been reported for studies of Wh-word development for English L1 learners (see, e.g., Davis, 1932; Savić, 1975; Tyack and Ingram, 1977). What (both qu'est-ce que and quoi) and where (où) were by far the most frequent and were the first-learned. When (quand) and how (comment) were used infrequently and were not used at all until the very end of the 15-month observation. Who (qui) was fairly infrequent, but was productive long before when and how. Why (pourquoi) emerged between who and when/how. Swain (1972) found a similar order for young children who were French/English bilinguals. Felix (1977) found a similar order for children learning German L2.

This finding that the order of emergence of Q-word forms was similar for L1 and L2 was surprising for two reasons: (1) both Kenny and Greg used all these Q-word (Wh-word) forms productively in English, their L1; (2) there is reason to believe that the order of emergence of Q-word forms in L1 is at least partly determined by cognitive development (for example, the two-year old L1 child asks only what and where questions meaningfully precisely because he does not yet understand the concepts underlying why, when, and how questions). Further analysis of the L2 learners' language in context revealed, however, that although Kenny and

Greg never used quand, they sometimes did ask questions about time. They did this by substituting another Q-word or by circumlocution. An example of the former is Kenny asking Louise about the date of her birthday, "Où est ton fête?". An example of the latter is his asking when she will be returning for another visit, "/a/ viens un autre fois?... jeudi, vendredi, dimanche, tu vas être ici?".

In both the reports described above, the results point to similarities between L1 and L2 learners in the sequence of emergence of development of linguistic form, but dissimilarity in terms of the sequence of emergence of the meanings expressed. L2 learners simply had more to say than forms for saying it. Thus they "borrowed" the language forms they knew for certain meanings, pressing them into service to express new ones. This "old forms for new functions" is a strategy used by L1 learners as well (see Slobin, 1973), but the L2 learners seemed to stretch their old forms further than L1 learners do because of the relatively greater gap between cognitive and linguistic development.

The present report is based on further study of Kenny and Greg's development of question form and meaning. The

study involves (1) the extension of the original analysis of Q-word frequency to data collected in the year since the earlier study was completed; (2) further analysis of all the data, in terms of the development of word order inversion in questions; and, (3) analysis of relations between the form and the meaning in some of the children's questions.

Table 1 is a summary description of the speech samples which form the data base for this study. The two figures for

INSERT TABLE 1 ABOUT HERE

mean length of utterance (MLU(1) and MLU(2)) and the two figures for total utterances are arrived at by considering, in the case of the first figure, all intelligible utterances and, in the case of the second figure, all utterances except oui, non, and numbers chanted in sequence (See Lightbown (1977a) for further discussion of the computation of these indices.).

Frequency of Q-Word Utterances

The overall frequency of utterances containing question words was similar throughout the period of the study. Figure 1 shows the proportion of total utterance tokens (using the total (2) from Table 1) which contained a Q-word as an inter-

Table 1

Summary of Language Samples

Kenny	VII[a,b]	VIII[b]	IX[b]	X[b]	XI	XII	XIII[b]	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI	XXII
Age	6,1	6,2	6,3	6,5	6,6	6,6	6,7	7,0	7,1	7,2	7,4	7,9	7,11	8,1	8,4	8,6
MLU (1)	2.42	2.79	2.17	2.34	1.96	2.61	2.39	2.41	3.02	2.88	2.53	2.93	4.05	3.48	4.28	4.69
MLU (2)	2.86	2.81	2.99	2.52	2.24	3.32	3.22	3.02	3.62	3.77	3.95	3.47	4.55	4.47	4.55	5.24
Total Utterances (1)	347	344	241	150	112	345	321	491	554	592	551	612	584	501	536	561
Total Utterances (2)	241	239	137	101	91	244	205	378	447	418	359	412	453	350	407	474
Sample Length[c]	75	75	100	40	50	80	100	110	110	95	85	110	110	75	75	100

Greg	II[b]	III	IV	V[b]	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV
Age	5,9	6,1	6,2	6,3	6,8	6,9	6,10	7,0	7,5	7,7	7,9	8,0	8,2	8,2
MLU (1)	2.04	2.47	2.35	2.68	2.80	2.94	3.49	3.97	4.10	3.90	4.28	4.79	3.99	3.48
MLU (2)	2.48	2.80	3.26	3.25	3.24	3.15	4.07	4.40	4.57	4.86	4.60	5.92	4.58	3.95
Total Utterances (1)	249	429	428	433	887	754	479	448	927	569	549	516	715	462
Total Utterances (2)	161	262	365	314	729	625	426	379	802	504	491	452	587	410
Sample Length[c]	75	75	100	55	110	110	95	55	110	110	75	75	120	100

[a] Roman numerals represent play sessions. Those analyzed in this study represent the same 29-month period in each child's L2 development (January 1976 - June 1978).

[b] Greg or Kenny alone with adult investigator. In all other samples the two children played together with her except GXIV when Greg played with Louise and another child.

[c] Minutes of recording session during which the child was present.

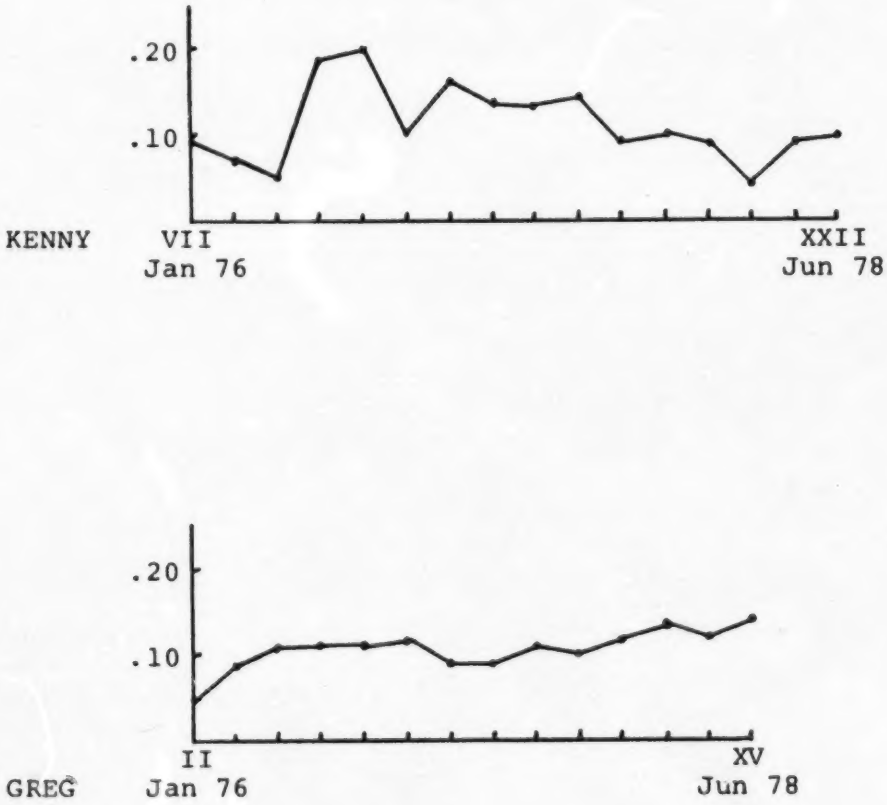

Figure 1. Proportion of utterance tokens in each sample which included a Q-word used as an interrogative.

INSERT FIGURE 1 ABOUT HERE

rogative (as opposed to a Q-word as a relative clause marker, e.g., je ne sais pas qui va venir). Each point on the horizontal axis represents one speech sample. It is clear that there was little change over time in the proportion of utterance tokens which had the form of Q-word questions.

There was considerable change, however, in the relative frequency of each Q-word. In the early samples the questions "où est...?" and "qu'est-ce que c'est?" alone accounted for over half the questions. Combining the four most frequent Q-words (qu'est-ce que, où, quoi, and qui) accounted for 90% or more of the Q-word questions in most samples described in the previous report (up through April 1977 - KXVII and GIX). However, as Tables 2 and 3 show, the

INSERT TABLES 2 AND 3 ABOUT HERE

relative frequency of these questions decreased substantially in the following months as the less frequent and later learned questions, especially pourquoi and various forms of quel (quelle, lequel, etc.), increased.

Table 2

Proportion of Q-Word Utterances Accounted for by Different Q-Words

Greg	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV
où	.12	.14	.49	.44	.68	.36	.46	.33	.11	.08	.01	.11	.15	.02
qu'est-ce-que	-	.48	.24	.18	.08	.15	-	.06	.01	.02	.10	.18	.10	.10
quoi	-	.05	.02	.09	.19	.33	.24	.25	.60	.55	.40	.32	.35	.39
qui	.88[a]	.33[a]	.19	.30	.01	.01	.13	.19	.05	-	.12	.07	-	.17
TOTAL OF ABOVE	1.0	1.0	.94	1.0	.96	.85	.83	.83	.77	.65	.53	.68	.60	.68
quand	-	-	-	-	-	-	-	.03	.03	.02	.12	.05	.01	.04
comment	-	-	-	-	-	-	-	-	.02	-	.03	-	.06	.12
pourquoi	-	-	-	-	.05	.10	.16	.11	.13	.22	.08	.19	.08	.04
combien	-	-	-	-	-	-	-	-	-	.06	.03	.04	.08	.02
quel, quelle, lequel, etc.	-	-	.05	-	-	.03	-	.03	.05	.06	.10	.06	.15	.12
TOTAL N[b] Q-WORD UTTERANCE	8	21	41	34	84	73	37	36	84	49	60	57	71	57

[a] See Lightbown (1978) for an explanation of the high frequency of qui in these samples.

[b] This analysis is based on utterance tokens rather than utterance types and includes both single-word and multi-word utterances.

Table 3

Proportion of Q-Word Utterances Accounted for by Different Q-Words

Kenny	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI	XXII
où	.52	.44	.57	.70	.67	.33	.50	.52	.40	.50	.26	.19	.23	.07	.08	.09
qu'est-ce que	.38	.19	.14	.24	.05	.38	.21	.12	.23	.11	.13	.09	.17	.07	.15	.35
quoi	-	.19	.14	.06	.11	.13	.18	.21	.13	.23	.45	.49	.37	.53	.26	.11
qui	-	.13	.14	-	.16	.04	.03	.12	.20	.09	.06	.07	-	.13	.21	.06
TOTAL OF ABOVE	.90	.95	.99	1.0	1.0	.88	.92	.97	.96	.93	.90	.84	.77	.80	.70	.61
quand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.02
comment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.03	.04
pourquoi	.09	.06	-	-	-	.04	.03	.02	.02	.03	-	.07	.14	.07	.05	.02
combien	-	-	-	-	-	-	-	-	-	-	-	-	.06	.07	.05	.04
quel, quelle, lequel, etc.	-	-	-	-	-	.08	.03	-	-	.02	.10	.09	.03	.07	.18	.26
TOTAL N[a] Q-WORD UTTERANCES	21	16	7	17	18	24	34	48	60	58	31	43	35	15	39	46

[a] This analysis is based on utterance tokens rather than utterance types and includes both single-word and multi-word utterances.

It was not the case that Kenny and Greg had never used these question meanings in L2 but rather that they had not used the corresponding forms. As detailed in the previous report on question development, the children had, in fact, used various strategies (e.g., Q-word substitution and circumlocution) for expressing these meanings. Furthermore, the English equivalents of these Q-words were used productively in their L1 speech. Thus, the reason for the increase in frequency of pourquoi, combien, quel, etc. in L2 cannot be attributed to either (1) a recently acquired understanding of the concepts they encode (which one might expect in L1) or (2) a lack of need for the forms in earlier samples since the need had been felt but served by other forms.

Among the possible explanations for the fact that certain question forms were learned before others is the likelihood that certain Q-words were much more frequent than others in the speech the children heard. Unfortunately, the data which we have available do not include samples of speech the children heard in the classroom. Only one sample of peer speech was recorded and this was near the end of the period of observation. However it is enlightening to look at the speech addressed to the children by the adult francophone research assistant.

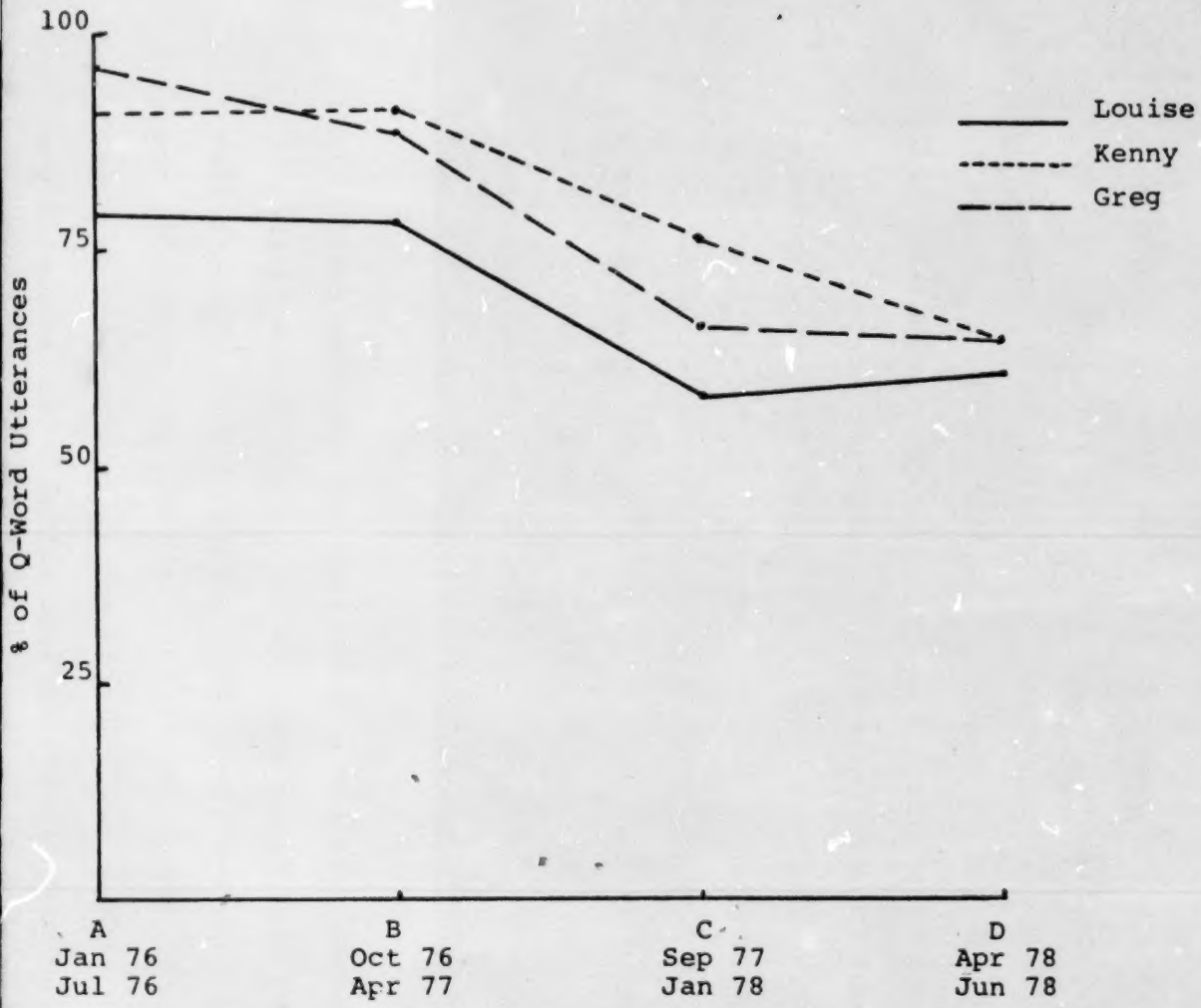

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Figure 2 Percent of Q-word utterances accounted for by most frequent Q-words (qu'est-ce que, où, quoi, qui) combined.

Figure 2* shows, for both L2 learners (Kenny and Greg) and the francophone research assistant (Louise), the percent of the total number of Q-word questions which included one of the four Q-words which were most frequent in the early samples of L2 speech (qu'est-ce que, quoi, qui, où). The corpus for the native speaker includes over 1000 Q-word questions. The corpus

INSERT FIGURE 2 ABOUT HERE

for Kenny includes over 500 Q-word questions; for Greg, over 700 (See Tables 2 and 3 for the number of questions each child produced in each sample.).

Figure 2 shows the increase in diversity of questions used by the L2 learners and of the questions directed to them by the adult interlocutor. The similarity of the three curves is striking.** Even though the native speaker's speech always contained greater diversity of Q-words than the non-native speakers', the diversity of both increased as the L2 learners developed greater facility with the language. This finding fits well with the current hypothesis that there are simplified registers, often called "foreigner talk", in which native speakers

* In Figures 2, 3, and 4, speech samples have been grouped into four time periods. The appendix shows which samples are included in each period.

** Hatch (1974) has reported similar results from the analysis of composite data of adult native speakers interacting with L2 children.

consciously or unconsciously attempt to simplify their speech in order to facilitate communication with L2 learners (see, e.g., Ferguson, 1975).

Some previous research has suggested that native speakers adjust the complexity of questions by, for example, shifting from a Wh-question (a Q-word question) to a yes/no or choice question* (Campbell, et al., 1977). The results of this study suggest that native speakers also have a sense that there is an order of difficulty among Q-words themselves. The increased diversity over time cannot be attributed to changes in the non-linguistic context since that remained essentially stable.

The fact that there was change over time in the Q-words addressed to the children by the native speaker and the fact that the relative frequency of the native speaker's different Q-words closely followed the order of emergence and overall frequency of the learners' Q-words, suggest that foreigner talk, like "motherese" (Newport, 1977), is not static but changes in very subtle ways with the increased skill of the learner.

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* A hypothetical example of such a sequence is: where do you live? do you live in Montreal? do you live in Montreal, Quebec, Chicoutimi...?

Word Order in Q-Word Utterances

With the exception of the est-ce segment in the phrase "qu'est-ce que...", inversion was extremely rare in the corpus. The few examples that did occur appeared to be rote-learned routines. For example, "quelle heure est-il?" and "quel âge a-t-il?" or "quel âge as-tu?". The hypothesis that the questions about age were rote-learned is confirmed by the fact that alternative forms of the question were not, for example "quel âge est-ce qu'il a?" or "il a quel âge?" but "il est quel âge?" and the corresponding affirmative was "il est 5 ans". There were a few utterances in the very last samples where avoir rather than être is used but even then avoir was at least as frequent as être. Similarly, although each child produced scores of questions with où which might appear to have been formed with subject-copula inversion and preposing of the Q-word, these appear in fact to have been nothing more than a rote-learned formula "où est" which was probably perceived as a single word. In the later samples, when où and est were separated and où was combined with other verbs, uninverted word order was used.

GX C'est où on peut mettre les autres comme ça?
GXIV Où il était?
KXVIII D'où tu viens?

There are no examples of full-verb inversion with Q-words (e.g., que penses-tu de ce jeu?) and inversion was rare in yes/no questions as well. The children showed no evidence of having learned yet that French permits full-verb inversion. The few cases of inversion which did exist in the data fit English rules for inversion. That is, either modals or forms of être were inverted, for example, "maman, peux-tu faire Kathy arrêter de pleurer?" or "quelle couleur était l'avion?". Both these sentences could be translated word for word from English (with the exception of the particle de in the first example). Examples such as these and the rote-learned qu'est-ce que and où est do not provide evidence regarding whether the children have internalized any rules of word order for interrogation in French other than those carried over from English.

An examination of the native speaker's speech may again provide insight. The corpus of native speaker speech includes a very small number of subject-verb inversions - again with the exception of units like "où est___" and "est-ce que___". The other cases include a small number of sentences in the passé composé, e.g., "as-tu terminé?", where the auxiliary inversion leaves the full verb in its post-subject position. Interestingly the only occasion on which there were more than two or three inversions among hundreds of questions was when the native speaker was engaging the children in an activity which was more structured than the usual play sessions. She had been given a set of photographs (those used in the Tyack and Ingram study with young L1 learners) and her instructions were to ask a series of Q-word questions about each photograph. She was not instructed to use any particular word-order - only to ask several Q-word questions about each picture. In the context of this slightly more formal task, the native speaker spontaneously used inversion far more frequently than in any other sample of her speech. The children appeared baffled by it and the questions with inverted order were sometimes processed as if they had subject-verb-object order.

L: qui touche-t-il?

K: qui touche qui?*

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* Difficulty in processing questions with qui as object of the verb was also reported by Ervin-Tripp & Miller (1977) and Tyack & Ingram (1977).

Comprehension was better for sentences where subject-verb order was retained in the noun-verb sequence, and only the redundant pronoun was inverted (e.g., comment le garçon dort-il?). Even this form sometimes caused confusion, however.

L: pourquoi le garçon ici conduit-il?

K: J'ai pas très bien compris qu'est-ce que t'as dit.

It appears likely, then, that subject-verb inversion was rare in the speech the children heard. For both yes/no and Q-word questions in the native speaker's speech, declarative word order was almost always left unchanged or est-ce que was added to form the question. For example:

pourquoi il fait ça?
comment tu prononces ton nom?
quelle heure il est là?
où est-ce qu'il est?

Form-Meaning Relations in Q-Word Utterances

It has been pointed out above that knowing what Q-word forms were present in the corpus did not give sufficient information about the meanings which were encoded. Similarly,

it was necessary to analyze the whole question in context rather than interpret it on the basis of the form alone. For example, it has been observed by other researchers that there is a predominance of copular sentences in early L1 and L2 information (Q-word) questions (Felix, 1976; Wode, 1978). In terms of form alone, this was true for Kenny and Greg's French L2 questions for the first 15 months of this study. However, analysis of the meanings expressed shows that not all questions with copular form had copular meaning.

Figure 3 shows the extent to which questions with qu'est-ce que were "equational", that is, had a copular verb

INSERT FIGURE 3 ABOUT HERE

(e.g., qu'est-ce que c'est) or no verb (e.g., qu'est-ce que ça) as opposed to qu'est-ce que tu fais, for example. Figure 4 shows the proportion of questions with où which had the form où est. However, the fact that the utterances had

INSERT FIGURE 4 ABOUT HERE

the form of copular sentences does not mean that they encoded only the meanings of copular sentences. Among the many questions with "où est", for example, there were always some which expressed other meanings. For example, "où est ça?" was used in a context where its meaning could only be "where

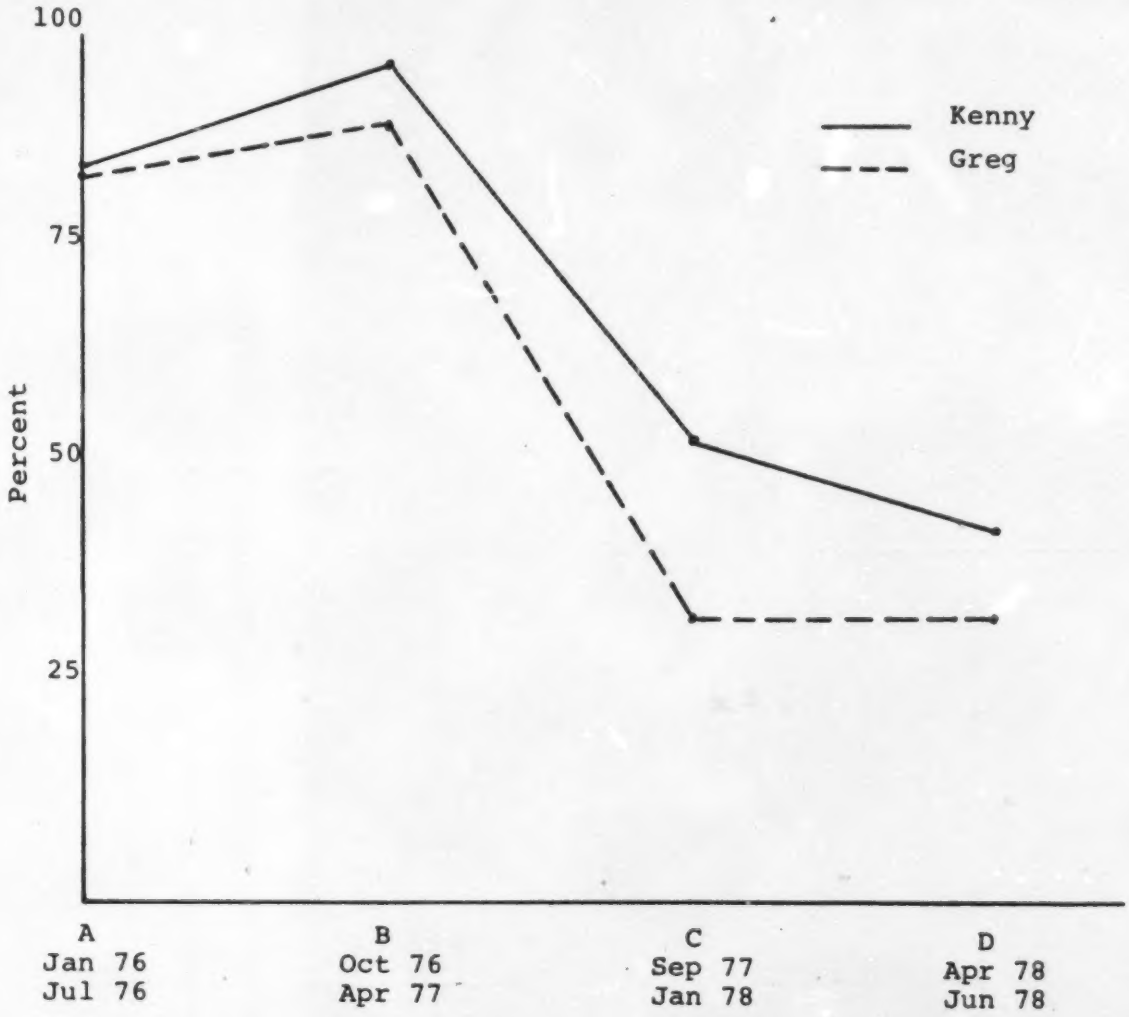

Figure 4. Percen' of où questions which had the form où est.

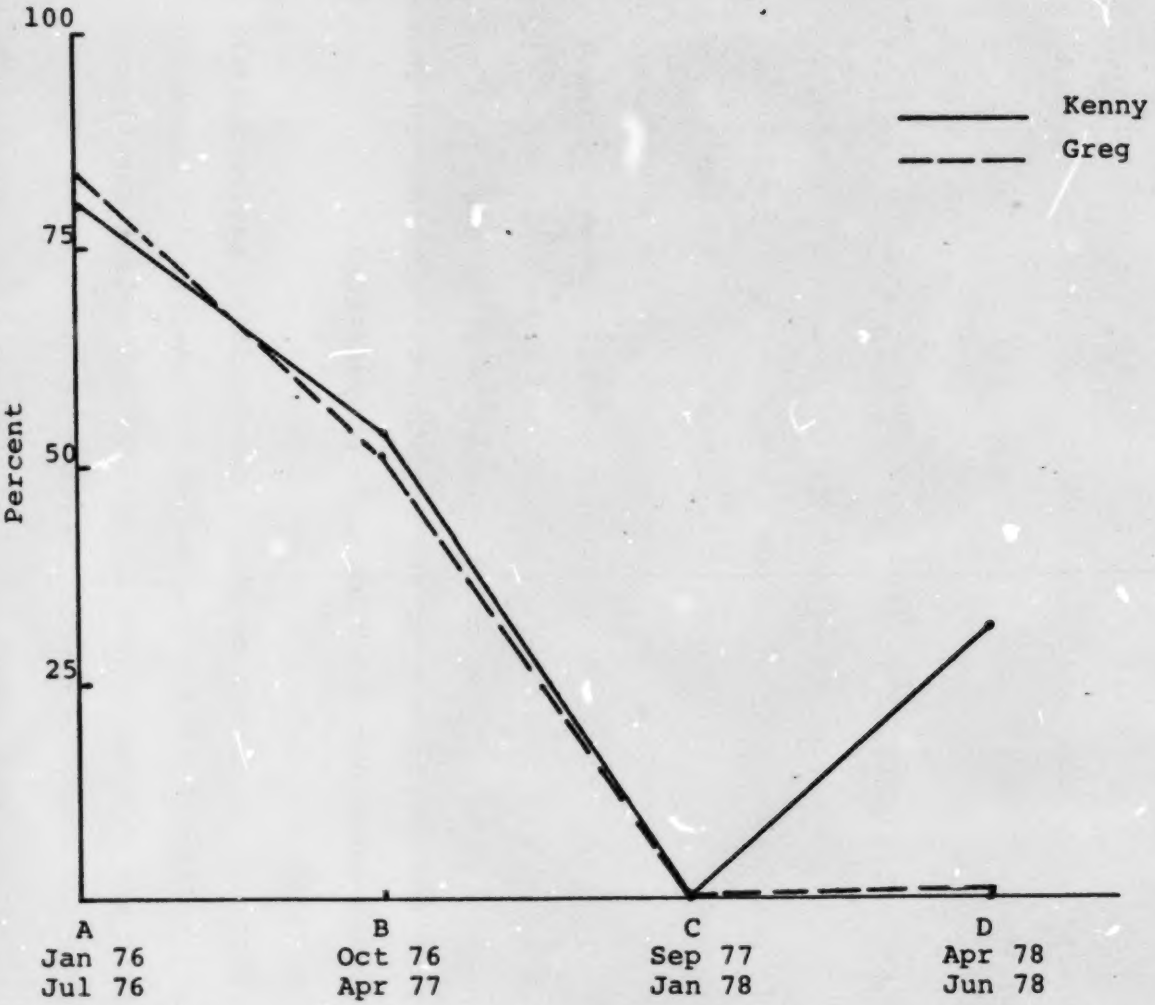

Figure 3. Percent of questions with qu'est-ce que which were qu'est-ce que c'est.

does this go?" or "where shall I put this?" but not "where is that?" since the child was holding the object referred to or pointing to it.

Continuation of the Research

In the continuation of this research we will follow up the longitudinal study and expand the study both by further analysis of the development of question form and meaning by these two children and by cross-sectional validation of the findings of the longitudinal case studies. Subsequent reports will deal more extensively with proposed explanations for the observed sequence in the emergence of different Q-word forms and with the development of the L2 learners' accuracy in answering Q-word questions (Lightbown, in preparation).

Further, we intend to obtain two kinds of native speaker data: (1) "input" data collected in the environment where the learners are exposed to the L2 and (2) comparison data from children for whom the target language is L1.

Native speaker input data are clearly important because of issues such as subject-verb inversion in questions raised in this study. Asking native speakers what they do will not always give us accurate information about what L2 learners hear. The native speaker in this case thought she used inversion much more than she actually did.

Native-speaker comparison data are important in the development of a general language learning theory. Too often L2 speech is treated in isolation or in comparison to what we think L1 learners might say or write in a given situation (some exceptions to this include Harley and Swain, 1977; Lapkin and Swain, 1977; Tarone, Frauenfelder, and Selinker, 1976; Wode, 1978). The problem of who the appropriate comparison groups are is not easily resolved, however. That is, it is not immediately evident whether one should compare L2 learners to their age-peers or to children who are younger but whose language skills are more like those of the L2 learner. Unfortunately, we are far from developing adequate indices of linguistic development which could guide us in choosing appropriate comparison groups. This in itself is an important line of research which we intend to pursue.

REFERENCES

Bloom, L., & Lahey, M. Language development and language disorders. New York: John Wiley & Sons, 1978.

Campbell, C., Gaskill, W., & Vander Brook, S. Some aspects of foreigner talk. In C. Henning (Ed.), Proceedings of the Los Angeles Second Language Research Forum. Los Angeles: University of Los Angeles, 1977, pp. 94-106.

Davis, E. The form and function of children's questions. Child Development, 1932, 3, 57-74.

Ervin-Tripp, S., & Miller, W. Early discourse: Some questions about questions. In M. Lewis and L. Rosenblum (Eds.), Interaction, conversation, and the development of language. New York: John Wiley, 1977.

Felix, S. Some differences between first and second language acquisition. Paper presented at the 3rd International Symposium on Child Language, London, 1975.

Felix, S. Wh-pronouns in first and second language acquisition. Linguistische Berichte, 1976, 44, 52-64.

Felix, S. Cognition and language development: A German child's acquisition of question words. Mimeo. University of Kiel, 1977.

Ferguson, C.A. Towards a characterization of English foreigner talk. Anthropological Linguistics, 1975, 17, 1-14.

Harley, B., & Swain, M. An analysis of verb form and function in the speech of French immersion pupils. Working Papers on Bilingualism, 1977, 14, 33-46.

Hatch, E. Second language learning -- universals? Working Papers on Bilingualism, 1974.

Lapkin, S., & Swain, M. The use of English and French cloze tests in a bilingual education program evaluation: validity and error analysis. Language Learning, 1977, 27, 279-314.

Lightbown, P.M. Consistency and variation in the acquisition of French. Unpublished PhD dissertation, Columbia University, 1977(a).

Lightbown, P.M. French L2 learners: What they're talking about. Proceedings of the First Annual Second Language Research Forum, University of California at Los Angeles, February 11-13, 1977(b).

Lightbown, P.M. Question form and question function in the speech of young French L2 learners. In M. Paradis (Ed.), Aspects of bilingualism, Columbia, S.C.: Hornbeam press, 1978.

Lightbown, P.M. The acquisition and use of questions by French L2 learners. To appear in S. Felix (Ed.), Recent Trends in Research on Second Language Acquisition, (in preparation).

Newport, E.L., Gleitman, H., & Gleitman, L. Mother, I'd rather do it myself: Some effects and non-effects of maternal speech style. In C. Snow and C. Ferguson (Eds.), Talking to Children. New York: Cambridge University Press, 1977.

Savić, S. Aspects of adult-child communication: The problem of question acquisition. Journal of Child Language, 1975. 2, 251-260.

Slobin, D. Cognitive prerequisites for the development of grammar. In C.A. Ferguson and D.I. Slobin (Eds.), Studies of child language development. New York: Holt, Rinehart, and Winston, Inc., 1973.

Swain, M. Bilingualism as a first language. Unpublished PhD dissertation, University of California at Irvine, 1972.

Tarone, E., Frauenfelder, U., & Selinker, L. Systematicity/variability and stability/instability in interlanguage systems. In H.D. Brown (Ed.), Papers in Second Language Acquisition, Language Learning, Special issue no. 4, 1976.

Tyack, D., & Ingram, D. Children's production and comprehension of questions. Journal of Child Language, 1977, 4, 211-224.

Wode, H. The L1 vs. L2 acquisition of English interrogation. Working Papers on Bilingualism, 1978, 15, 37-57.

APPENDIX

Speech Samples Grouped into Four Time Periods

Period A	Jan 1976 - Jul 1976
	K VII - XIII
	G II - V
Period B	Oct 1976 - Apr 1977
	K XIV - XVII
	G VI - IX
Period C	Sep 1977 - Jan 1978
	K XVIII - K XX
	G X - XII
Period D	Apr 1978 - Jun 1978
	K XXI - XXII
	G XIII - XV